

REMARKS

Claim Objections

Under the Office Action, claim 13 was objected to because of informalities (see page 2, first paragraph of the Action). By way of this Amendment, Applicants have amended Claim 13 in accordance with the Examiner's suggestions and have also amended Claim 1 to correct various minor informalities. Consequently, the objections of record should be withdrawn.

Claim Rejections

Under the Office Action, claims 1-5 and 13 were rejected under 35 U.S.C. 103(a) as being unpatentable over Yang, et al. (US 2003/0015662 A1) in view of Schofield, et al. (US 2002/0167589 A1). The rejections of claims 1-5 and 13 are not supported because Yang, et al. fails to teach the elements of the claims as asserted in the Action and because neither Yang, et al., Schofield, et al. nor the prior art provide any "teaching or motivation" to combine Yang, et al. and Schofield, et al. in the manner suggested by the Action. Moreover, and perhaps most importantly, the Yang, et al. publication describes a wholly inoperable device that is literally unusable to satisfy the purpose of the present invention.

In particular, Yang, et al. utterly fails to teach an arrangement that generates a "visible image representative of said output at a position visible to the eye of said user" (claim 1, lines 11-12 of the present application). Yang, et al. teaches placing LCD flat panel displays 41-42 immediately in front of where a human eye would view them, perhaps spaced away by about 2cm. Placing LCD flat panel displays that close to the unaided eye makes it physically impossible to focus on them, and therefore any images seen by the eye will be completely out of focus, appearing as a more or less unstructured blur (See enclosed Page 207 from Optics by Eugene Hecht, Addison-Wesley, 1998). In addition such an arrangement would inherently provide a view of only a very small part of a display. The combination of blurred images and narrowed field of render the device essentially useless. Without intervening optics as taught only by the Applicant to form an image essentially at "infinity" relative to the eye (see Fig. 6, eyepiece assembly 170, and paragraphs 41 and 43 of the present Application), images displayed by an LCD flat panel could not possibly meaningfully represent the captured scene to the viewer. To understand the severity of this problem, Applicants urge the

Examiner to place an LCD flat panel display (e.g., from the back panel of a digital still camera) immediately in front of his eye and attempt to view an image on it. It should be apparent that such a display can only be clearly viewed by spacing it away from the unaided eye by 10 or more centimeters.

While the Action relies on a combination with Schofield, et al. for further elements of the claimed invention not taught in Yang, et al., the Action offers no motivation for combining the clearly dissimilar teachings of these references. The burden is on the Examiner, in the first instance, to demonstrate that there is some "suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings." See MPEP § 2143 under the subheading "ESTABLISHING A *PRIMA FACIE* CASE OF OBVIOUSNESS." While the present invention is a compact and lightweight device adaptable for wearing by humans, Schofield, et al. teaches an elaborate, expensive, and cumbersome apparatus intended for integration into motor vehicles. In seeking to accomplish the teachings of the Applicants, one would hardly expect a person of ordinary skill in the art to investigate rear- and side-view mirror replacement systems as taught by Schofield, et al. to meet the limitations of the presently claimed invention.

Furthermore, Schofield, et al. does not teach nor does it provide any motivation to use a single solid state imager for use with non-passive infrared detection as taught by the Applicants. The passage of Schofield, et al. to which the Action refers (par. 66 of Schofield, et al. as referenced on page 3 of the Action) merely makes a broad and imprecise reference to "image-array devices of the type used in nightvision systems" (par. 66, lines 12-14 of Schofield, et al.). In other words, Schofield, et al. refers to nothing more than the expensive, elaborate night vision detection systems already in use by the market (and adaptable to a vehicle) and offers no motivation for incorporation into a device as taught by the Applicants.

The only suggestion for the claimed combination comes from the Applicants, and the Office may not rely on the Applicants' teachings to provide the suggestion for combining references. Since the Examiner has not provided reasoning in support for combining the cited references, the rejection is wholly unfounded and should therefore be withdrawn. Additionally, replacing the flat panel LCD displays of Yang, et al. with some other as in Schofield, et al. would not correct the inoperability problem demonstrated above.

Claims 6-7 were rejected under 35 U.S.C. 103(a) as being unpatentable over Yang, et al. in view of Schofield, et al. as applied to claim 5 above and in further view of Brennan et al. (US 4,463,252). Since the rejection of claim 5 is not supported as just discussed above, the rejections of claims 6-7 are similarly unsupported and should be withdrawn. Moreover, the switching between the two modes of Brennan are between one where no IR illumination is present and an image intensifier tube is used with available light and one where IR illumination is turned on to aid in performing nearby tasks such as map reading under low ambient conditions. Thus, this is unlike the present invention where switching is done between wide and narrow angle fields of illumination with IR present in both.

Claims 8-11 were rejected under 35 U.S.C. 103(a) as being unpatentable over Yang, et al. (US 2003/0015662 A1) in view of Schofield, et al. as applied to claim 1 in further view of Lenko, et al. (US 4,915,478). Since the rejection of claim 1 is not supported as discussed above, the rejections of claims 8-11 are similarly unsupported and should be withdrawn. Moreover, apart from the Applicant's own teaching, there is no suggestion or motivation in any of the references of this combination that they be combined in the manner of the claimed invention.

Claim 12 was rejected under 35 U.S.C. 103(a) as being unpatentable over Yang, et al. in view of Schofield, et al. and Lenko, et al. as applied to claim 8, and in further view of Brennan (see page 7, first paragraph of the Action). Because the rejection of claim 8 is unsupported as discussed above, the rejection of claim 12 is similarly unsupported and should be withdrawn. Moreover, the eyepiece element of Brennan upon which the Action relies operates significantly differently and serves a much different purpose than the eyepiece taught by the Applicants. The eyepiece subassembly 34 of Brennan is a telescope that focuses a collimated image passing from outside the goggle system directly through to the operator (i.e. as in a pair of binoculars) while the eyepiece of the claimed invention focuses on an image displayed by an LCD display panel embedded within the presently claimed device after being transmitted from an imager. Thus, the telescopic eyepiece of Brennan would clearly not function within the presently claimed device to produce a meaningful image for the operator. Hence, the resulting combination suggested by the Action in the rejection of Claim 12 is unsupported for these reasons in addition to the reasons discussed above. In addition being a telescope renders it unusable for seeing nearby objects since telescopes are designed for seeing distant objects giving off collimated or nearly collimated light.

Claim 14 was rejected under 35 U.S.C. 103(a) as being unpatentable over Yang, et al. (US 2003/0015662 A1) in view of Schofield, et al. and Lenko, et al. as applied to claim 8 in further view of Shaw, et al. (US 6,419,372 B1) (see page 7, second paragraph of the Action). Because the rejection of claim 8 is unsupported as discussed above, the rejection of claim 14 is similarly unsupported and should be withdrawn. Furthermore, the Action is unjustified in its reliance on combining the teachings of Shaw with other prior art to meet the limitations of the claimed invention. Nothing in Shaw, et al. teaches, suggests, or motivates its use with a device used for the purpose of discerning objects with near-IR or IR sensitive detectors and preventing radiation from LCD panels from interfering with such detectors. Although Shaw, et al. teaches an LCD backlighting apparatus with dual daytime and dimmed nighttime viewing modes, Shaw, et al. provides no motivation or inferences to use its teachings other than for typical applications such as clock radios, vehicle instrument panels, and the like that have separate dimming modes for easing the visibility of the LCD displays to the observer. The burden is on the Examiner to provide a motivation or teaching in order to support a rejection under 35 U.S.C. 103(a). Because the Action and Shaw, et al. fails to meet this burden, the present rejection is unsupported for this reason in addition to the reasons previously discussed.

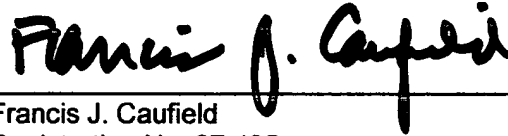
Claims 15-17 were rejected under 35 U.S.C. 103(a) as being unpatentable over Yang, et al. in view of Schofield, et al. as applied to claim 1 in further view of Salapow, et al. (US 6,486,473 B2). Since the rejection of claim 1 is not supported as discussed above, the rejections of claims 15-17 are similarly unsupported and should be withdrawn.

In view of the discussion above, it is believed that none of the references of record taken either singly or in combination teach or suggest the present invention as claimed. Accordingly, Applicant respectfully requests that a timely Notice of Allowance be issued in this application.

Respectfully submitted,

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